

A Compilation of Information on the $^{32}\text{S}(p,\gamma)^{33}\text{Cl}$ Reaction and Properties of Excited Levels in ^{33}Cl ^a

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Abstract

This report documents a survey of the literature, and provides a compilation of data contained therein, for the $^{32}\text{S}(p,\gamma)^{33}\text{Cl}$ reaction. Considerable attention is paid to properties of the levels in ^{33}Cl which are located in the vicinity of excitation of the compound-nuclear system $^{32}\text{S} + p$ near the proton separation energy for ^{33}Cl . It is this particular energy region which is especially important for applications in nuclear astrophysics. Summaries of all the located references are provided and numerical data contained in them are compiled in EXFOR format where applicable.

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